

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A vacuum apparatus comprising:
a vacuum container having a gas inlet and a gas outlet;
a high vacuum pump connected to said gas outlet of said vacuum container, wherein said high vacuum pump is configured to operate in a molecular flow region and depressurize the inside of said vacuum container or maintain the inside of said vacuum container in a depressurized state;
a vacuum pump of at least one stage connected to ~~[[said]]~~ a gas outlet of said ~~vacuum container for depressurizing the inside of said vacuum container or maintaining the inside of said vacuum container in a depressurized state~~ high vacuum pump; and
a compressor connected to a discharge port of the last-stage vacuum pump of said at least one-stage vacuum pump ~~without divergence, and having capability of depressurizing wherein said compressor is configured to aspirate all of gases from the last-stage vacuum pump and depressurize~~ an input side of said compressor.
2. (Original) A vacuum apparatus according to claim 1, wherein the number of vacuum pump stages is set to one stage or a plurality of stages depending on a gas amount introduced into said vacuum container.
3. (Original) A vacuum apparatus according to claim 1, wherein the number of vacuum pump stages is set to the plurality of stages.
4. (Currently Amended) A vacuum apparatus according to any one of claims 1 to 3, further comprising a gas recovery apparatus ~~for recovering~~ configured to recover a gas discharged from said last-stage vacuum pump for re-use of said gas; ~~and,~~ wherein said compressor is ~~a gas recovery compressor in~~ serves as said gas recovery apparatus.
5. (Currently Amended) A vacuum apparatus comprising:
a vacuum container to be depressurized having a gas inlet and a gas outlet~~[[,]]~~;

a high vacuum pump connected to said gas outlet of said vacuum container, wherein said high vacuum pump is configured to operate in a molecular flow region and depressurize the inside of said vacuum container or maintain the inside of said vacuum container in a depressurized state;

~~vacuum pumps of a plurality of stages connected to said container for depressurizing the inside of said container and maintaining the inside of said container in a depressurized state;~~ high vacuum pump; and

a gas recovery apparatus ~~for recovering~~ configured to recover a gas discharged from the last-stage vacuum pump of said vacuum pumps for re-use of said gas;

wherein;

said vacuum apparatus further comprises a gas recovery compressor, connected to a discharge port of said last-stage vacuum pump without divergence, wherein said compressor is configured to aspirate all of gases from the last-stage vacuum pump and having depressurization capability for assisting assist a depressurization operation of said last-stage vacuum pump and suppressing back diffusion from said discharge port, and said gas recovery compressor serves as said gas recovery apparatus.

6. (Currently Amended) A vacuum apparatus according to claim 5, wherein: a supply amount of a gas introduced into said container is smaller than a predetermined amount, and said last-stage vacuum pump is omitted,

~~a gas discharged from the vacuum pump at the stage prior to the last stage being recovered and reused by said gas recovery apparatus~~ wherein said gas recovery compressor ~~[[being]]~~ is connected to a discharge port of said vacuum pump at the stage prior to the last stage without divergence, and

wherein a gas discharged from the vacuum pump at the prior stage is recovered and reused by said gas recovery compressor.

7. (Currently Amended) A vacuum apparatus comprising:
a container to be depressurized having a gas inlet and a gas outlet;
a first vacuum pump configured to operate in a molecular flow region and maintain ~~for maintaining~~ the inside of said container to be depressurized;

a second vacuum pump connected at a subsequent stage of said first vacuum pump;
a third vacuum pump connected at a subsequent stage of said second vacuum pump;
and

a compressor ~~having depressurization capability and~~ connected to said third vacuum pump without divergence, wherein the compressor is configured to aspirate all of gases from the third vacuum pump.

8. (Original) A vacuum apparatus according to claim 7, wherein said first vacuum pump is a turbomolecular pump or a thread groove pump, and said second vacuum pump is a booster pump, said third vacuum pump being a dry pump.

9. (Currently Amended) A vacuum apparatus according to claim 7 or 8, further comprising a gas recovery apparatus ~~for recovering~~ configured to recover a gas discharged from said third vacuum pump for re-use of said gas, wherein said compressor ~~is a gas recovery compressor in~~ serves as said gas recovery apparatus.

10. (Currently Amended) A vacuum apparatus comprising:
a container to be depressurized having a gas inlet and a gas outlet and introduced with a gas in a supply amount smaller than a predetermined amount;
a first vacuum pump configured to operate in a molecular flow region and maintain ~~for maintaining~~ the inside of said container to be depressurized;
a second vacuum pump connected at a subsequent stage of said first vacuum pump;
and
a compressor ~~having depressurization capability and~~ connected to said second vacuum pump without divergence, wherein the compressor is configured to aspirate all of gases from the second vacuum pump.

11. (Original) A vacuum apparatus according to claim 10, wherein said first vacuum pump is a turbomolecular pump or a thread groove pump, and said second vacuum pump is a booster pump.

12. (Currently Amended) A vacuum apparatus according to claim 10 or 11, further comprising a gas recovery apparatus ~~for recovering~~ configured to recover a gas discharged from said second vacuum pump for re-use of said gas, wherein said compressor is ~~a gas recovery compressor in~~ serves as said gas recovery apparatus.

13. (Previously Presented) A vacuum apparatus according to any one of claims 1, 5, 7 or 10, wherein the vacuum pump connected to said compressor is a screw pump.

14. (Cancelled)